

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Canceled)

2. (Currently Amended) A logged-in device ~~in accordance with claim 1, wherein said~~ that is logged in by a plurality of specific devices via a predetermined communication path, the logged-in device comprising:

_____ a response unit that gives a response of failed log-in to one specific device of interest, which has just output a request of log-in, when a number of specific devices that currently log in the logged-in device reaches a predetermined allowable number of simultaneous log-ins; and

_____ a re-request timing specification unit that specifies a timing of re-request of log-in to determine a time when the specific device of interest, which has just output the request of log-in, should output another request of log-in, and assigns the specified timing of re-request to the specific device of interest, when the response unit gives the response of failed log-in, a predetermined relationship being between the specified timing and the specific device of interest,

the re-request timing specification unit comprises including:

_____ a precedence designation unit that allocates an ordinal number of precedence to ~~said~~the specific device of interest, which has just output the request of log-in; and

_____ a re-request timing determination unit that determines the timing of re-request of log-in with regard to ~~said~~the specific device of interest, based on the ordinal number of precedence allocated to ~~said~~the specific device of interest.

3. (Currently Amended) A logged-in device ~~in accordance with claim 2, wherein~~
~~said~~ that is logged in by a plurality of specific devices via a predetermined communication
path, the logged-in device comprising:

a response unit that gives a response of failed log-in to one specific device of
interest, which has just output a request of log-in, when a number of specific devices that
currently log in the logged-in device reaches a predetermined allowable number of
simultaneous log-ins; and

a re-request timing specification unit that specifies a timing of re-request of
log-in to determine a time when the specific device of interest, which has just output the
request of log-in, should output another request of log-in, and assigns the specified timing of
re-request to the specific device of interest, when the response unit gives the response of
failed log-in, a predetermined relationship being between the specified timing and the specific
device of interest,

the re-request timing specification unit including:

a precedence designation unit that allocates an ordinal number of
precedence to the specific device of interest, which has just output the request of log-in, and

a re-request timing determination unit that determines the timing of
re-request of log-in with regard to the specific device of interest, based on the ordinal number
of precedence allocated to the specific device of interest,

the precedence designation unit ~~allocates~~ allocating ordinal numbers of
precedence to ~~said~~ the plurality of specific devices in a sequence of outputting first requests
of log-in.

4. (Currently Amended) A logged-in device ~~in accordance with claim 2, wherein~~
~~said~~ that is logged in by a plurality of specific devices via a predetermined communication
path, the logged-in device comprising:

a response unit that gives a response of failed log-in to one specific device of interest, which has just output a request of log-in, when a number of specific devices that currently log in the logged-in device reaches a predetermined allowable number of simultaneous log-ins; and

a re-request timing specification unit that specifies a timing of re-request of log-in to determine a time when the specific device of interest, which has just output the request of log-in, should output another request of log-in, and assigns the specified timing of re-request to the specific device of interest, when the response unit gives the response of failed log-in, a predetermined relationship being between the specified timing and the specific device of interest,

the re-request timing specification unit including:

a precedence designation unit that allocates an ordinal number of precedence to the specific device of interest, which has just output the request of log-in, and

a re-request timing determination unit that determines the timing of re-request of log-in with regard to the specific device of interest, based on the ordinal number of precedence allocated to the specific device of interest, the re-request timing determination unit assigns assigning a shorter timing of re-request of log-in to a specific device having a higher ordinal number of precedence.

5. (Canceled)

6. (Canceled)

7. (Currently Amended) ~~A logged-in device in accordance with claim 2, wherein~~
said that is logged in by a plurality of specific devices via a predetermined communication path, the logged-in device comprising:

a response unit that gives a response of failed log-in to one specific device of interest, which has just output a request of log-in, when a number of specific devices that

currently log in the logged-in device reaches a predetermined allowable number of simultaneous log-ins; and

a re-request timing specification unit that specifies a timing of re-request of log-in to determine a time when the specific device of interest, which has just output the request of log-in, should output another request of log-in, and assigns the specified timing of re-request to the specific device of interest, when the response unit gives the response of failed log-in, a predetermined relationship being between the specified timing and the specific device of interest,

the re-request timing specification unit including:

a precedence designation unit that allocates an ordinal number of precedence to the specific device of interest, which has just output the request of log-in, and

a re-request timing determination unit that determines the timing of re-request of log-in with regard to the specific device of interest, based on the ordinal number of precedence allocated to the specific device of interest,

said the logged-in device comprises including at least one logical unit, which is independently logged in by each of ~~said the~~ plurality of specific devices,

the response unit gives-giving a response of failed log-in with regard to a certain logical unit to one specific device of interest, which has just output a request of log-in to ~~said the~~ certain logical unit, when a number of specific devices that currently log in ~~said the~~ certain logical unit reaches an allowable number of simultaneous log-ins preset for ~~said the~~ certain logical unit, and

~~said the~~ re-request timing specification unit ~~specifies-specifying~~ a timing of re-request of log-in to determine a time when ~~said the~~ specific device of interest, which has just output the request of log-in to ~~said the~~ certain logical unit, should output another request of log-in to ~~said the~~ certain logical unit, and ~~assigns-assigning~~ the specified timing of re-

request to ~~said the~~ specific device of interest, when ~~said the~~ response unit gives the response of failed log-in.

8. (Canceled)

9. (Currently Amended) A logged-in device ~~in accordance with claim 2, wherein~~
~~said that is logged in by a plurality of specific devices via a predetermined communication~~
~~path, the logged-in device comprising:~~

a response unit that gives a response of failed log-in to one specific device of
interest, which has just output a request of log-in, when a number of specific devices that
currently log in the logged-in device reaches a predetermined allowable number of
simultaneous log-ins; and

a re-request timing specification unit that specifies a timing of re-request of
log-in to determine a time when the specific device of interest, which has just output the
request of log-in, should output another request of log-in, and assigns the specified timing of
re-request to the specific device of interest, when the response unit gives the response of
failed log-in, a predetermined relationship being between the specified timing and the specific
device of interest,

the re-request timing specification unit including:

a precedence designation unit that allocates an ordinal number of
precedence to the specific device of interest, which has just output the request of log-in, and

a re-request timing determination unit that determines the timing of
re-request of log-in with regard to the specific device of interest, based on the ordinal number
of precedence allocated to the specific device of interest,

the plurality of specific devices are ~~being~~ adjusted not to output the request of
log-in simultaneously via ~~said the~~ predetermined communication path.

10. (Canceled)

11. (Currently Amended) A logged-in device ~~in accordance with claim 2, wherein said~~ that is logged in by a plurality of specific devices via a predetermined communication path, the logged-in device comprising:

a response unit that gives a response of failed log-in to one specific device of interest, which has just output a request of log-in, when a number of specific devices that currently log in the logged-in device reaches a predetermined allowable number of simultaneous log-ins; and

a re-request timing specification unit that specifies a timing of re-request of log-in to determine a time when the specific device of interest, which has just output the request of log-in, should output another request of log-in, and assigns the specified timing of re-request to the specific device of interest, when the response unit gives the response of failed log-in, a predetermined relationship being between the specified timing and the specific device of interest,

the re-request timing specification unit including:

a precedence designation unit that allocates an ordinal number of precedence to the specific device of interest, which has just output the request of log-in, and

a re-request timing determination unit that determines the timing of re-request of log-in with regard to the specific device of interest, based on the ordinal number of precedence allocated to the specific device of interest,

the predetermined communication path ~~comprises including~~ an IEEE1394 bus.

12. (Canceled)

13. (Currently Amended) A logged-in device ~~in accordance with claim 2, said that~~ is logged in by a plurality of specific devices via a predetermined communication path, the logged-in device comprising:

a response unit that gives a response of failed log-in to one specific device of interest, which has just output a request of log-in, when a number of specific devices that currently log in the logged-in device reaches a predetermined allowable number of simultaneous log-ins; and

a re-request timing specification unit that specifies a timing of re-request of log-in to determine a time when the specific device of interest, which has just output the request of log-in, should output another request of log-in, and assigns the specified timing of re-request to the specific device of interest, when the response unit gives the response of failed log-in, a predetermined relationship being between the specified timing and the specific device of interest,

the re-request timing specification unit including:

a precedence designation unit that allocates an ordinal number of precedence to the specific device of interest, which has just output the request of log-in, and

a re-request timing determination unit that determines the timing of re-request of log-in with regard to the specific device of interest, based on the ordinal number of precedence allocated to the specific device of interest,

the logged-in device communicating with ~~said~~ the plurality of specific devices
according to an SBP-2 protocol.

14. (Canceled)
15. (Canceled)
16. (Canceled)
17. (Canceled)
18. (Canceled)
19. (Canceled)

20. (Currently Amended) A method ~~in accordance with claim 19, wherein said of~~ controlling log-in, so as to enable a plurality of log-in devices to log in at least one logical unit included in a logged-in device via a predetermined communication path, the method comprising:

(a) causing the logged-in device to give a response of failed log-in with regard to a certain logical unit to one log-in device of interest, which has just output a request of log-in to the certain logical unit, when a number of log-in devices that currently log in the certain logical unit reaches an allowable number of simultaneous log-ins preset for the certain logical unit;

(b) causing the logged-in device to specify a timing of re-request of log-in to determine a time when the log-in device of interest, which has just output the request of log-in to the certain logical unit, should output another request of log-in to the certain logical unit, and to assign the specified timing of re-request to the log-in device of interest, when the response of failed log-in is given, a predetermined relationship between the specified timing and the log-in device of interest; and

(c) causing the log-in device of interest to output another request of log-in to the certain logical unit included in the logged-in device at the specified timing of re-request when the log-in device of interest receives the response of failed log-in with regard to the certain logical unit and the specified timing of re-request from the logged-in device,

the step (b) including causing ~~said the~~ logged-in device to allocate ordinal numbers of precedence to ~~said the~~ plurality of log-in devices in a sequence of outputting first requests of log-in to ~~said the~~ certain logical unit, and to assign a shorter timing of re-request of log-in to a log-in device having a higher ordinal number of precedence.

21. (Canceled)

22. (Currently Amended) A computer program product that causes a computer to carry out a series of logged-in processing, the computer being logged in by a plurality of specific devices via a predetermined communication path, the computer program product comprising:~~in accordance with claim 21, wherein said~~

a first program code that causes the computer to give a response of failed log-in to one specific device of interest, which has just output a request of log-in, when a number of specific devices that currently log in the logged-in device reaches a predetermined allowable number of simultaneous log-ins;

a second program code that causes the computer to specify a timing of re-request of log-in to determine a time when the specific device of interest, which has just output the request of log-in, should output another request of log-in, and to assign the specified timing of re-request to the specific device of interest, when the response of failed log-in is given, a predetermined relationship being between the specified timing and the specific device of interest; and

a computer readable medium, in which the first program code and the second program code are stored,

the second program code comprises~~including:~~

a program code that causes~~said the~~ computer to allocate ordinal numbers of precedence to ~~said the~~ plurality of specific devices in a sequence of outputting first requests of log-in, and to assign a shorter timing of re-request of log-in to a specific device having a higher ordinal number of precedence.

23. (Canceled)

24. (Canceled)

25. (Currently Amended) A data signal ~~in accordance with claim 24,~~ embodied in a carrier, the data signal representing a computer program that causes a computer to carry out

a series of logged-in processing, the computer being logged in by a plurality of specific devices via a predetermined communication path, the data signal comprising:

_____ a first program code that causes the computer to give a response of failed log-in to one specific device of interest, which has just output a request of log-in, when a number of specific devices that currently log in the logged-in device reaches a predetermined allowable number of simultaneous log-ins; and

_____ a second program code that causes the computer to specify a timing of re-request of log-in to determine a time when the specific device of interest, which has just output the request of log-in, should output another request of log-in, and to assign the specified timing of re-request to the specific device of interest, when the response of failed log-in is given, a predetermined relationship between the specified timing and the specific device of interest,

_____ ~~wherein said the~~ second program code ~~comprises~~ including:

_____ a program code that causes ~~said the~~ computer to allocate ordinal numbers of precedence to ~~said the~~ plurality of specific devices in a sequence of outputting first requests of log-in, and to assign a shorter timing of re-request of log-in to a specific device having a higher ordinal number of precedence.

26. (Canceled)

27. (Canceled)

28. (Currently Amended) A computer program that causes a computer to carry out a series of logged-in processing, the computer being logged in by a plurality of specific devices via a predetermined communication path, the computer program comprising:
_____ in accordance with claim 27,

_____ a first program code that causes the computer to give a response of failed log-in to one specific device of interest, which has just output a request of log-in, when a

number of specific devices that currently log in the logged-in device reaches a predetermined allowable number of simultaneous log-ins; and

a second program code that causes the computer to specify a timing of re-request of log-in to determine a time when the specific device of interest, which has just output the request of log-in, should output another request of log-in, and to assign the specified timing of re-request to the specific device of interest, when the response of failed log-in is given, a predetermined relationship being between the specified timing and the specific device of interest,

wherein said the second program code comprises including:

a program code that causes said the computer to allocate ordinal numbers of precedence to said the plurality of specific devices in a sequence of outputting first requests of log-in, and to assign a shorter timing of re-request of log-in to a specific device having a higher ordinal number of precedence.

29. (Canceled)